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6) Other:

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1-5, 7-18 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore means for connection with a first electrical outlet one booster, booster station including means for connection with a second electrical outlet, and means for communication over a common electrical wiring system between said first and second electrical outlets as disclosed in claims 4, 15-16 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-2, 7, 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (2002/0049036 A1) in view of Berger et al. (US Patent 5,728,263).
- (1) With regard to claim 1, Bullock et al. discloses in Fig. 1, a system for a cordless modem comprising: a base station (102) comprising means (111) for connection with a communication line (col. 5, lines 26-29); a remote unit (106-109) for connection with an interface of a modem (element 107 shows a modem, as is a modem inherent in element 108, the fax machine); at least one booster station (element 105; Bullock et al. discloses the extension unit amplifying the data signals from elements 106-109; pg. 3, paragraph 0074); said base station including means (103; through interface 112) for wireless communication with said remote unit; said remote unit comprising means (104) for wireless communication with at least said base station. Bullock et al. teaches the use of antenna 104 for use of transmitting from each of elements 106-109 to the base station 102. Bullock et al. does not however disclose said base

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station including means for testing and selecting a frequency providing a strongest reception from a plurality of available channels for wireless communication between said base station and said remote unit.

However, means for testing and selecting a frequency providing a strongest reception from a plurality of available channels is well-known in the art as disclosed by Berger et al. in his selection of communication channel in a digital cordless telephone. Berger et al. discloses in Fig. 4, means (elements 420, 422, 424) for testing and selecting a frequency providing a strongest reception from a plurality of available channels for wireless communication between a base station and a remote unit (col. 5, lines 6-26).

It would have been obvious to one skilled in the art at the time of invention to incorporate the well-known teachings of Berger et al. to identify the available communication channel (col. 1, lines 54-55).

(2) With regard to claim 2, Berger et al. also discloses wherein said means for testing includes means for comparing levels of test patterns communicated between said base station and said remote unit (col. 3, lines 36-54).

It would have been obvious to one skilled in the art at the time of invention to incorporate the well-known teachings of Berger et al. to identify the available communication channel (col. 1, lines 54-55).

(3) With regard to claim 7, claim 7 inherits all limitations of claim 1, above. As noted above, Bullock et al. in combination with Berger et al. disclose all limitations of claim 1 above. They do not however explicitly teach the remote unit is arranged in the case of a portable computer, Bullock et al. does teach the remote comprising a computer modem (107). One skilled

in the art would know that computer modems inside laptops are well known in the art and thus would not constitute a patentable limitation.

- (3) With regard to claim 10, though neither of the inventors disclose a remote unit including an antenna arranged on the case of a portable computer so that it is oriented upward when the computer is open, lap tops with antennae and antennae design in general are well known in the art and an antenna arranged on the case of a portable computer so that it is oriented upward when the computer is open would be a mere design choice of one skilled in the art.
- (4) With regard to claim 11, claim 11 discloses the method of the system disclosed in claim 1. Therefore a similar rejection applies.
- (5) With regard to claim 12, claim 12 inherits all limitations of claim 11 above. As noted, Bullock et al. in combination with Berger et al. disclose all limitations of claim 11. Furthermore, Berger et al. also discloses wherein step (d) comprises generating a test pattern for transmission between said base station and said remote unit (col. 3, lines 36-54).

It would have been obvious to one skilled in the art at the time of invention to incorporate the well-known teachings of Berger et al. to identify the available communication channel (col. 1, lines 54-55).

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (2002/0049036 A1) in view of Berger et al. (US Patent 5,728,263) as applied to claim 1 above, and further in view of Ito et al. (US Patent 6,690,915 B1).

As noted above, the combination of Bullock et al. and Berger et al. discloses all

limitations of claim 1, above. They do not however teach the system according to claim 1, further comprising at least one booster station in wireless communication with said base station and said remote unit, said at least one booster station including receiving means for receiving information transmitted from said base station and said remote unit and transmitting means for transmitting information to said base station and said remote unit.

However, systems comprising a booster station in wireless communications with a base station and a remote are well known in the art as verified by Ito et al. Ito et al. teaches in Fig. 1, a system comprising at least one booster station (100) in wireless communication with a base station (180, 182) and remote unit (132), said at least one booster station including receiving means (118) for receiving information transmitted from said base station and said remote unit and transmitting (120) means for transmitting information to said base station and said remote unit.

It would have been obvious to one skilled in the art at the time of invention to incorporate the teachings of Ito et al. as a known method of amplifying and transmitting signals to be transferred between a base station and a remote (col. 1, lines 11-16).

(3) With regard to claim 8, claim 8 inherits all limitations of claim 3, above. Bullock et al. teaches the remote comprising a computer modem (107). One skilled in the art would know that computer modems inside laptops are well known in the art and thus would not constitute a patentable limitation.

- 6. Claims 4, 5, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (2002/0049036 A1) in view of Berger et al. (US Patent 5,728,263) as applied to claim 1 above, and further in view of Bullock et al. (US Patent 6,778,817B1).
- (1) With regard to claim 4, claim 4 inherits all limitations of claim 1 above. As noted above, Bullock et al. in combination with Berger et al. disclose all limitations of claim 1. They do not disclose wherein said base station includes means for connection with a first electrical outlet, and said system further comprises at least one booster station being in wireless communication with said remote unit, said booster station including means for connection with a second electrical outlet (105, 307), and said base station and said at least one booster station including means for communication over a common electrical wiring system between said first and second electrical outlets.

However, Bullock et al. 6,778,817 B1 teaches a method and system for combining wireless phone jack and RF wireless communications wherein he discloses in Fig(s) 2, 3, a base station (104) includes means for connection with a first electrical outlet (105), and said system further comprises at least one booster station (106) being in wireless communication with a remote unit (109), said booster station including means for connection with a second electrical outlet (105, 307), and said base station and said at least one booster station including means for communication over a common electrical wiring system between said first and second electrical outlets (col. 4, lines 30-57).

It would have been obvious to one skilled in the art at the time of invention to combine the teachings of Bullock et al. as a method of providing a telephone communication system for

the communication of signals using A/C power lines and wireless RF signals (col. 2, line 61 - col. 3, line 12).

- (2) With regard to claim 5, Bullock et al. 6,778,817 B1 teaches that in certain cases the power lines could supply reliable communications and thus the use of the signal booster and RF antenna would not be needed. Though Bullock et al. does teach the method of determining the most reliable communication method, one skilled in the art could readily adapt the method for use in the booster as taught by Berger et al. as appplied to the base station to acertain the more reliable method of communications between the devices.
- (3) With regard to claim 9, claim 9 inherits all limitations of claim 5, above. As noted 5 though neither of the cited references explicitly teach the remote unit is arranged in the case of a portable computer, Bullock et al. does teach the remote comprising a computer modem (107). One skilled in the art would know that computer modems inside laptops are well known in the art and thus would not constitute a patentable limitation.
- 7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (2002/0049036 A1) in view of Berger et al. (US Patent 5,728,263) as applied to claim 11 above, and further in view of Ito et al. (US Patent 6,690,915 B1).

As noted above, the combination of Bullock et al. and Berger et al. discloses all limitations of claim 11, above. They do not however teach the method according to claim 11, further comprising providing at least one booster station in wireless communication with said base station and said remote unit, said at least one booster station receiving an re-transmitting communications between said base station and said remote unit.

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However, systems comprising a booster station in wireless communications with a base station and a remote are well known in the art as verified by Ito et al. Ito et al. teaches in Fig. 1, a method comprising providing at least one booster station (100) in wireless communication with a base station (180, 182) and remote unit (132), said at least one booster station receiving (118) and retransmitting communications between said base station and said remote unit (col. 1, lines 11-16).

It would have been obvious to one skilled in the art at the time of invention to incorporate the teachings of Ito et al. as a known method of amplifying and transmitting signals to be transferred between a base station and a remote (col. 1, lines 11-16).

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (2002/0049036 A1) in view of Berger et al. (US Patent 5,728,263) as applied to claim 11 above, and further in view of Ito et al. (US Patent 6,690,915 B1).

As noted above, the combination of Bullock et al. and Berger et al. discloses all limitations of claim 12, above. They do not however teach the method according to claim 12, further comprising providing at least one booster station in wireless communication with said base station and said remote unit, said at least one booster station receiving an re-transmitting communications between said base station and said remote unit.

However, systems comprising a booster station in wireless communications with a base station and a remote are well known in the art as verified by Ito et al. Ito et al. teaches in Fig. 1, a method comprising providing at least one booster station (100) in wireless communication with a base station (180, 182) and remote unit (132), said at least one booster station receiving (118)

and retransmitting communications between said base station and said remote unit (col. 1, lines 11-16).

It would have been obvious to one skilled in the art at the time of invention to incorporate the teachings of Ito et al. as a known method of amplifying and transmitting signals to be transferred between a base station and a remote (col. 1, lines 11-16).

- 9. Claims 15, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (2002/0049036 A1) in view of Berger et al. (US Patent 5,728,263) as applied to claim 11 above, and further in view of Bullock et al. (US 6,778,817 B1).
- (1) With regard to claim 15, as noted above, the combination of Bullock et al. and Berger et al. disclose all limitations of claim 11. They do not however disclose, wherein step (a) includes providing a connection for said base station to an electrical outlet of an electrical system; and step (g) includes providing the at least one booster station with a connection to another electrical outlet of said electrical system; and (h) providing means for said base station and the at least one booster station to communicate over the electrical wiring system.

However, Bullock et al. (US 6,778,817 B1) discloses in Fig(s) 2, 3, wherein step (a) includes providing a connection (105) for said base station (104) to an electrical outlet of an electrical system; and step (g) includes providing the at least one booster station (106) with a connection to another electrical outlet (105, 307), of said electrical system; and (h) providing means (Fig. 3) for said base station and the at least one booster station to communicate over the electrical wiring system (col. 4, lines 30-57).

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It would have been obvious to one skilled in the art at the time of invention to combine the teachings of Bullock et al. as a method of providing a telephone communication system for the communication of signals using A/C power lines and wireless RF signals (col. 2, line 61 - col. 3, line 12).

(2) With regard to claim 17, Berger et al. also discloses testing and selecting a frequency channel providing a strongest reception from a plurality of available channels for wireless communication between said booster station and said remote unit (col. 5, lines 6-26).

It would have been obvious to one skilled in the art at the time of invention to incorporate the well-known teachings of Berger et al. to identify the available communication channel (col. 1, lines 54-55).

10. Claims 16, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (2002/0049036 A1) in view of Berger et al. (US Patent 5,728,263) as applied to claim 12 above, and further in view of Bullock et al. (US 6,778,817 B1).

As noted above, the combination of Bullock et al. and Berger et al. disclose all limitations of claim 12. They do not however disclose, wherein step (a) includes providing a connection for said base station to an electrical outlet of an electrical system; and step (g) includes providing the at least one booster station with a connection to another electrical outlet of said electrical system; and (h) providing means for said base station and the at least one booster station to communicate over the electrical wiring system.

However, Bullock et al. (US 6,778,817 B1) discloses in Fig(s) 2, 3, wherein step (a) includes providing a connection (105) for said base station (104) to an electrical outlet of an

electrical system; and step (g) includes providing the at least one booster station (106) with a connection to another electrical outlet (105, 307), of said electrical system; and (h) providing means (Fig. 3) for said base station and the at least one booster station to communicate over the electrical wiring system (col. 4, lines 30-57).

It would have been obvious to one skilled in the art at the time of invention to combine the teachings of Bullock et al. as a method of providing a telephone communication system for the communication of signals using A/C power lines and wireless RF signals (col. 2, line 61 - col. 3, line 12).

(2) With regard to claim 18, Berger et al. also discloses testing and selecting a frequency channel providing a strongest reception from a plurality of available channels for wireless communication between said booster station and said remote unit (col. 5, lines 6-26).

It would have been obvious to one skilled in the art at the time of invention to incorporate the well-known teachings of Berger et al. to identify the available communication channel (col. 1, lines 54-55).

Allowable Subject Matter

- 11. Claim 6 is allowed.
- 12. Claims 19-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

The instant application discloses a system for a cordless modem. A search of prior art records has failed to teach or suggest alone or in combination:

"a communication system comprising a base station, a booster station and a remote unit configured for wireless communication among each other, said base station being configured for connection to said booster station via a common electrical wiring system; wherein said base station periodically tests wireless communication with said remote unit and when reception between said base station and said remote unit is stronger than reception between said booster station and said remote unit, said base station stops communicating with said booster station via the common electrical wiring system and wirelessly communicates directly with said remote unit" as disclosed in claim 6.

"a method for providing a system for a cordless modem comprising the steps of: when reception between said at least one booster station and said remote unit is stronger than reception between said base station and said remote unit, communicating by said base station with the at least one booster station only via the electrical wiring system" as disclosed in claim 19 and 20.

"a method for providing a system for a cordless modem comprising the steps of:

periodically testing wireless communication with said remote unit and when reception between
said base station and said remote unit is stronger than reception between the at least one booster
station and said remote unit, said base station stops communicating with the at least one booster
station via the common electrical wiring system and communicates directly with said remote unit
by wireless communication" as disclosed in claims 21 and 22.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037. The examiner can normally be reached on Monday-Friday (8:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ghayour Mohammad can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw

December 31, 2006

PRIMARY EXAMINER

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